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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,268	12/09/2003	Perry Opin	Q73377	3324
65565 7590 01/08/2008 SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213				
			EXAMINER WERNER, JONATHAN S	
			ART UNIT 3732	PAPER NUMBER
			MAIL DATE 01/08/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/730,268

Applicant(s)

OPIN ET AL.

Examiner

Jonathan Werner

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-13, 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Applicant's amendment received 10/29/07.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 8-10 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christoff et al. (US 6,071,119) in view of Voudouris² (US 6,168,428).
As to claims 1 and 8, Christoff et al. discloses an orthodontic bracket comprising a base (22) attachable to teeth surfaces; a bracket main body (20) equipped on one side of the base; an arch wire slot (30) along a mesiodistal direction in the bracket main body; a U-shaped belt-like clip (32) having a catching end portion (34) which can cover up the arch wire slot when in use (i.e. see Figure 3); a guide portion (i.e. channel 38) formed in at least one of the bracket main body and the base, and which is operative to guide the clip as shown especially in Figures 3-5); a middle groove (i.e. a portion of the groove is shown as the spaced apart region between wings 26, and the other portion is shown as the spaced apart region between wings 28; Figures 1-2) formed on a middle area of the bracket main body along a direction perpendicular to the mesiodistal direction; and a wall portion (46) which extends upward from an edge of the middle groove and faces

the cover portion (i.e. see especially Figures 2-5). Christoff fails to explicitly show a recess portion at the upper end part of the clip. Voudouris, however, teaches a similar orthodontic bracket which comprises a clip member for securing an arch wire to a bracket base, wherein said clip member has a recess portion substantially in a V-shape (i.e. 30B, Figure 1; 51, Figure 5) at its upper end. Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to include such a recess on the clip member in order to accommodate a tool to facilitate removal of said clip as taught by Voudouris (column 9, lines 38-39 and column 10, lines 29-31). As to claim 2, the orthodontic bracket's recess portion is a concave portion (Voudouris; column 11, lines 27-28). As to claims 9-10, the clip of Christoff has a contacting portion (i.e. 34), and wherein when the clip is released from the bracket main body (as shown between Figures 3-4), said contacting portion contacts the wall portion (46). As to claim 13, the cover portion of Voudouris does not cover the recess portion (i.e. see Figures 1 and 5). As to claim 16, the catching cutout portion of Voudouris extends from an edge of the upper end part of the clip (Figure 1). It should be noted that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function and thus functional limitations are given little patentable weight in device claims, i.e. how a releasing position is regulated based on a position of the clip relative to the bracket main body. This rationale especially applies to claims 17-18, in which Applicant is claiming a statement of intended use, i.e. manipulating the clip so it does not come into contact with the bracket main body before it is moved to a

releasing position, whereby such statements and other functional limitations are given little patentable weight in device claims since they do not impose any further structural limitations on the claims distinguishable over the prior art which is capable of being used as claimed if one so desires. For example, Figure 2A of Voudouris shows the clip is capable of not being in contact with the bracket main body. With respect to claims 19-20, since the specific location of the wall portion is not claimed, wall portion (46) of Christoff fits the claimed description, wherein it extends in a direction perpendicular to the mesiodistal direction (i.e. Figure 2 shows the wall portion extending perpendicularly to the direction of the arch wire slot), and perpendicular to the direction of the middle groove (i.e. by extending upwards toward the top of the bracket in the direction where the cover is located; see Figures 3-5).

3. Claims 3-7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christoff in view of Voudouris as applied to claim 1 above, and further in view of Damon (US 6,071,118). Christoff and Voudouris disclose the orthodontic bracket as previously described, but fail to show the recess portion comprises a convex portion that protrudes from an outer surface of the clip. Damon, however, teaches an orthodontic bracket that comprises a clip (30) with a recess portion that is a cut-and-rising portion (Figure 7) comprising a convex portion (37/39) that protrudes from an outer surface of the clip in a direction facing away from the bracket main body (i.e. Figures 1-8).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to modify the recess portion as just described in order to provide

an engagement means for a manipulating tool as taught by Damon. As to claims 4 and 5, Figure 7 shows the convex portion is formed at an edge of the upper end part of the clip. As to claim 6, the convex portion is shaped substantially in a half-spherical dome (i.e. Figure 7). As to claim 7, Voudouris shows a recess portion that is a V-shaped cutout (30B). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to make the convex portion a V-shaped cutout in order to accommodate a tool to facilitate unlocking of the clip as taught by Voudouris. As to claim 12, Damon discloses a cut-and-rising portion which comprises a concave portion (38) connected to a convex portion (37).

Response to Arguments

4. Applicant's arguments filed 10/29/07 have been fully considered but they are not persuasive. In regard to claim 1, Applicant remarks that the wall portion (46) of Christoff does not extend upward from an edge of the middle groove. However, Applicant does not describe where the claimed wall portion is, or which particular edge of said groove the wall portion extends from. In this case, the wall portion (46) as shown in Figure 2 of Christoff extends upwardly from the edges of the middle groove that are located on the inside surface of said groove (i.e. the portion of the middle groove between wings 28).

5. Applicant additionally remarks that "the claimed middle groove allegedly corresponds to the gaps between the wings 28 and wings 26 of Figure 2" and that "the claimed wall portion does not extend upward from either end of the alleged middle

groove, but rather is disposed between the wings 28 and wings 26.” For clarification purposes, Examiner notes that the groove located between wings 28 and 26 is the arch wire slot (30), which extends in a mesiodistal direction. The claimed “middle groove” is represented by the space formed between each set of wings, i.e. one portion of the groove is defined as the space between wings 26 while the other portion of the groove is defined as the space between wings 28. This groove therefore extends perpendicularly to the arch wire groove, and hence the mesiodistal direction. Since Applicant does not specify which edge of the middle groove the claimed wall portion extends from, or the relationship of said wall portion with the cover portion (for example, by describing it's specific orientation in addition to how the wall portion faces the cover), the wall portion as claimed can extend from any edge of the middle groove, such as the edge directly against the sides of the groove portion located on the inside of each wing (28).

6. In response to Applicant's argument with respect to claim 3, Applicant asserts that the cut-and-rising portion comprising the convex portion (37/39) is actually meant to serve as a guide for moving the cover relative to the bracket, as opposed to using it as an engagement means for a manipulating tool, which thus renders the rejection under 35 U.S.C. 103 invalid. However, the fact that Applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

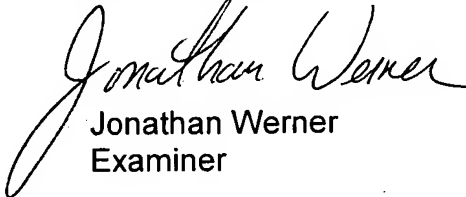
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Jonathan Werner
Examiner

1/4/08


MELBA N. BUMGARNER
PRIMARY EXAMINER